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MARSHALL, GERSTEIN & BORUN LLP (MICROSOFT)			EXAMINER	
233 SOUTH WACKER DRIVE			LIN, SHEW FEN	
6300 SEARS TOWER				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/692,501	Applicant(s) SHAPPELL ET AL.	
	Examiner SHEW-FEN LIN	Art Unit 2166	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-10 and 12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- a. This action is taken to response to Request for Continued Examination filed on 5/5/2008.
- b. Claims 1, 3, 5-6 and 9 have been amended. Claim 12 has been added. Claims 1-3, 5-10, and 12 are pending.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 7, 2008 has been entered.

Claim Objections

Claim 9 recites the limitation "the second computer device". There is insufficient antecedent basis for the limitation in the claim.

Claim 11 has incorrect status. Claim 11 has been canceled previously and should indicate the (Cancelled).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 5 is rejected under 35 U.S.C. 102(e) as being anticipated by Aboulhosn et al. (US Patent 6,938,042, hereinafter Aboulhosn).

As to claim 5, Aboulhosn discloses a method for updating a shared file in a computer network including a group of communicating computing devices in a peer-to-peer network (abstract, the file sharing system detects the access and requests that the file owner provide a copy of the file to the accessing member on a peer-to-peer basis, column 1, lines 59-60, group), **the method comprising**

performing, at a first computing device, a file system operation on a shared file associated with a first file icon corresponding to the shared file displayed in a first shared space display area to generate an updated shared file (Figure 1, column 4, lines 1-12, column 2, line 67, column 9, lines 42-46);

creating, at the first computing device, metadata associated with the updated shared file (column 2, lines 36-40, column 9, lines 42-46);

directly propagating, by the first computing device to a second computing device that has permission (to group member, column 2, lines 47-48, column 10, lines 6-7, file is transferred on a peer-to-peer basis, i.e. direct propagating), **the metadata associated with the updated shared file** (column 2, lines 18-20, column 9, lines 42-46);

obtaining, by the second computing device, the metadata associated with the updated shared file (column 2, lines 24-27, lines 40-41, column 9, lines 42-46);

determining, by the second computing device based on a file replication setting, whether the updated shared file should be replicated on the second computing device (column 2, lines 3-7) **comprising:**

if the file replication setting indicates an on-demand basis, downloading, by the second computing device (column 2, lines 3-7, lines 20-22, column 9, lines 47-49) **from multiple computing devices of the group, portions of the updated shared file upon receiving a user-demanded file replication indication, and**

if the file replication setting indicates automatic replication, automatically downloading (Aboulhosen col. 1 line 59 – col. 2 line 23 e.g. Whenever a shared file is modified, the file owner sends updated metadata for that file to the other members of the group), **by the second computing device from multiple computing devices of the group, portions of the updated shared file,**

wherein the multiple computing devices of the group are selected based upon at least one from a set of routing factors comprising: IP address (Aboulhosen col. 3 lines 1-13 e.g. IP address) **and least routing time; and**

displaying a second file icon corresponding to the shared file in a second shared space display area of the second computing device indicating that the shared file has been updated (Figures 2-4, column 2, lines 17-30, column 4, lines 13-23, column 4, lines 32-33).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-3, 9-10 and 12 are rejected under 35 U.S.C. 103(a) as being obvious by Aboulhosn et al. (US Patent 6,938,042, hereinafter Aboulhosn) in view of Wolff (U.S. Patent 6,009,427 hereinafter, "Wolff") and Window 98, Second Edition, by Paul McFedries, September 1999 (hereinafter, "Window 98").

As to claim 1, Aboulhosn discloses **a method of enabling file sharing over a serverless computer network among members of a shared space** (Aboulhosn Abstract e.g. The file sharing system allows a group of computer systems to be defined) **group** (abstract, the file

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sharing system detects the access and requests that the file owner provide a copy of the file to the accessing member on a peer-to-peer basis, i.e. serverless file sharing, column 1, lines 59-60, group) **comprising a first user and at least one other user** (Figure 5, member 1, member 2), **the method comprising:**

displaying to the first user via a first user graphical display a shared space indicator (Figure 1, column 3, line 66 to column 4, line 6) **including a first folder object** (Aboulhosn Abstract e.g. the files shared by a group are associated with a group folder),

the first folder object associated with the shared space group (Aboulhosn

Abstract e.g. the files shared by a group are associated with a group

folder) **and enabled to contain one or more shared file objects**

(Aboulhosn Abstract e.g. The folder at each member contains a file for each file that is shared by the group),

the shared space group comprising the first user and the at least one other user (Figures 2-3, Figure 5, item 513, column 4, lines 1-23);

change folder object setting (Aboulhosn col. 1 line 59 – col. 2 line 23 e.g. a shared file is identified by metadata stored in association with the virtual file (e.g., as properties of the virtual file)), **replicate file setting** (Aboulhosn col. 1 line 59 – col. 2 line 23 e.g. Whenever a shared file is modified, the file owner sends updated metadata for that file to the other members of the group);

receiving from the first user a first request to perform one from the set of folder system with respect to the (column 4, lines 6-12, column, lines 32-36) **first folder object;**

performing the first requested folder system operation (Aboulhosn col. 8 lines 47-67 e.g. creating new files); **and**

sending a direct communication from the first user over the network to a computing device used by the at least one other user that has permission to receive the communication (identifies the other members of the group and sends the updated metadata to each member, the first user [file owner], abstract, column 2, lines 47-48, column 3, lines 7-9, column 10, lines 6-7, file is transferred on a peer-to-peer basis, i.e. direct communication) **to indicate that the first folder object has been modified by the first user after such folder system operation has been performed** (column 2, lines 18-20, lines 36-40, whenever the actual file is changed at the file owner [the first user], the file owner sends the updated metadata for the file to the other members, column 9, lines 42-46) **wherein a graphical representation of the first folder object modification is displayed on the computing device used by the at least one other user** (Figures 2-3, column 2, lines 17-30, column 4, lines 13-23, lines 49-59).

Although Aboulhosn substantially teaches the claimed invention, Aboulhosn does not explicitly indicate the capability of **wherein the first user is not an owner of the shared space group and the at least one other user is not the owner of the shared space group; and specify new content of folder object.**

Wolff teaches **wherein the first user is not** (Wolf Abstract e.g. A distributed database-management system is disclosed in which multiple clients on a network share control over and responsibility for the coherency of a shared database with multiple records. the clients arbitrate between each other for exclusive editing access to each of the fields within each record) **an owner of the shared space group and the at least one other user is not** (Wolf Abstract e.g. A

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distributed database-management system is disclosed in which multiple clients on a network share control over and responsibility for the coherency of a shared database with multiple records. the clients arbitrate between each other for exclusive editing access to each of the fields within each record) **the owner of the shared space group; and specify new content** (Wolf col. 23 lines 6-19 e.g. A record with a free field marked free contains no data and is available to be used as a new, added record) **of folder object**.

It would have been obvious to one of ordinary skill in the art of folder management, at the time of the present invention, having the teachings of Aboulhosn and Wolff before him/her, to modify the folder management system of Aboulhosn, wherein the folder management system would include the teachings of Wolff because that would have allowed the folder management system to remove the bottlenecks and disadvantages associated with current distributed networks, while at the same time maintaining its advantages and allow the distribution of processes to function and be managed in a cross platform environment (Wolff col. 2 lines 57-63).

Although combination of Aboulhosn and Wolf substantially teaches the claimed invention, they do not explicitly indicate the capability of **displaying to the first user for selecting a set of folder system operations including: create folder object, rename folder, delete folder object, hide folder object, show hidden folder object**.

On the other hand, Window 98 teaches **displaying** (Window 98 pg. 127-162 e.g. Window Explorer) **to the first user for selecting a set of folder system operations including: create folder object** (Window 98 pg. 64 e.g. Select the File, New command), **rename folder** (Window 98 pg. 155 e.g. renaming your folder), **delete folder object** (Window 98 pg. 139 e.g. deleting a

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file), **hide folder object** (Window 98 pg. 135 e.g. to collapse a branch), **show hidden folder object** (Window 98 pg. 135 e.g. to expand a branch).

It would have been obvious to one of ordinary skill in the art of folder management, at the time of the present invention, having the teachings of Aboulhosn, Wolff and Window 98 before him/her, to modify the folder management system of Aboulhosn and Wolff combination, wherein the folder management system would include the teachings of Window 98 because that would have allowed the folder management system to provide simple tasks such as composing a memo or printing a file as computers should be (Window 98 Introduction).

As to claim 2, Aboulhosn discloses wherein the network is a peer-to-peer network (column 2, lines 15-18).

As to claim 3, Aboulhosn discloses presenting a graphical representation of the first requested folder system operation to the first user in response to receiving the folder system operation first request (Figure 1, column 3, lines 66-67, column 4, lines 9-12).

As to claim 9, Aboulhosn discloses **a method for adding a shared file to a shared space in a serverless computer network that includes a first online member of a group and at least one other online member of the group** (Aboulhosn Abstract e.g. The file sharing system allows a group of computer systems to be defined, the file sharing system detects the access and requests that the file owner provide a copy of the file to the accessing member on a

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peer-to-peer basis, i.e. serverless file sharing, column 1, lines 59-60, group), **the method including the steps of:**

displaying, to the first online member of group via a first user display of a first computing device, a group folder object corresponding to the shared space (Figures 2-4), wherein the first online member of the group is not an owner of the group;

activating a file system operation to move a file into the group folder object (column 2, line 67, add file to folder);

creating metadata concerning the moved file (column 2, lines 27-30, , column 9, lines 42-46);

directly transmitting the metadata to the at least one other online member of the group that has permission to receive the metadata (identifies the other members of the group and sends the updated metadata to each member, the first user [file owner], abstract, column 2, lines 47-48, column 3, lines 7-9, column 10, lines 6-7, file is transferred on a peer-to-peer basis, i.e. direct communication) **wherein the metadata indicates that the moved file has been modified by the first online member after such file system operation has been performed** (column 2, lines 18-20, lines 36-40, whenever the actual file is changed at the file owner [the first user], the file owner sends the updated metadata for the file to the other members, column 9, lines 42-46).

receiving, by the at least one other online member, the metadata (col. 2, lines 19-20, lines 24-27)

determining, by the at least one other online member based on a file replication setting, whether the moved file should be replicated on an at least one other computing

device used by the at least one other online member of the group (column 2, lines 3-7, lines 65-67, column 3, lines 33-35) **comprising:**

if the file replication setting indicates an on-demand basis, downloading, by the second computing device (column 2, lines 3-7, lines 20-22, column 9, lines 47-49) **from multiple computing devices of the group, portions of the move file upon receiving a user-demanded file replication indication from the other online member, and**

if the file replication setting indicates automatic replication, automatically downloading (Aboulhosn col. 1 line 59 – col. 2 line 23 e.g. Whenever a shared file is modified, the file owner sends updated metadata for that file to the other members of the group), **by the second computing device from multiple computing devices of the group, portions of the move file,**

wherein the multiple computing devices of the group are selected based upon at least one from a set of routing factors comprising: IP address (Aboulhosn col. 3 lines 1-13 e.g. IP address) **and least routing time; and**

displaying a graphical representation of the moved file modification on the at least one other computing device (Figures 2-4, column 2, lines 17-30, column 4, lines 13-23, column 4, lines 32-33).

Although Aboulhosn substantially teaches the claimed invention, Aboulhosn does not explicitly indicate the capability of **wherein the first user is not an owner of the shared space group and the at least one other user is not the owner of the shared space group; and specify new content of folder object.**

Wolff teaches **wherein the first user is not** (Wolf Abstract e.g. A distributed database-management system is disclosed in which multiple clients on a network share control over and responsibility for the coherency of a shared database with multiple records. the clients arbitrate between each other for exclusive editing access to each of the fields within each record) **an owner of the shared space group and the at least one other user is not** (Wolf Abstract e.g. A distributed database-management system is disclosed in which multiple clients on a network share control over and responsibility for the coherency of a shared database with multiple records. the clients arbitrate between each other for exclusive editing access to each of the fields within each record) **the owner of the shared space group; and specify new content** (Wolf col. 23 lines 6-19 e.g. A record with a free field marked free contains no data and is available to be used as a new, added record) **of folder object**.

It would have been obvious to one of ordinary skill in the art of folder management, at the time of the present invention, having the teachings of Aboulhosn and Wolff before him/her, to modify the folder management system of Aboulhosn, wherein the folder management system would include the teachings of Wolff because that would have allowed the folder management system to remove the bottlenecks and disadvantages associated with current distributed networks, while at the same time maintaining its advantages and allow the distribution of processes to function and be managed in a cross platform environment (Wolff col. 2 lines 57-63).

Although combination of Aboulhosn and Wolf substantially teaches the claimed invention, they do not explicitly indicate the capability of **through selection of a first selectable visual indicator to move a file into the group folder object**.

On the other hand, Window 98 teaches **through selection of a first selectable visual indicator to move a file into the group folder object** (Window 98 pg. 139-141, select the file or files to copy or move, drag and drop to the destination folder)

It would have been obvious to one of ordinary skill in the art of folder management, at the time of the present invention, having the teachings of Aboulhosn, Wolff and Window 98 before him/her, to modify the folder management system of Aboulhosn and Wolff combination, wherein the folder management system would include the teachings of Window 98 because that would have allowed the folder management system to provide simple tasks such as composing a memo or printing a file as computers should be (Window 98 Introduction).

As to claim 10, Aboulhosn discloses **wherein the network is a peer-to-peer network** (column 1, lines 12-14).

As to claim 12, Aboulhosn discloses **preventing new members** (Aboulhosn (2) e.g. The group owner may have the sole authority to invite other computer systems to join the group)

from being invited to join the shared space group, and

maintaining access (Aboulhosn (2) e.g. The group owner may have the sole authority to invite other computer systems to join the group), **for the first and the at least one other user, to the first folder and contents of the first folder.**

Window 98 discloses **performing the rename folder object operation only if an owner** (Window 98 pg. 155 e.g. renaming your folder) **request to perform the rename folder operation is received from the owner; and**

if an owner request to perform the delete folder object operation is received from the owner, performing the delete folder object operation (Window 98 pg. 139 e.g. deleting a file) **and:**

prohibiting alteration of one or more shared space group properties (Window 98 pg. 127-162 e.g. right click on the folder of the deleted folder object after the object is deleted, and select “properties”).

Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aboulhosn in view of Taylor et al. (US Patent 5,754,306, hereinafter referred as Taylor).

As to claims 6 and 7, Aboulhosn discloses the elements of claim 5 as noted above but does not explicitly disclose the step of displaying, by the second computing device, a third file icon corresponding to the shared file in the second shared space display area indicating that the shared file has not been updated when the updated shared file should not be replicated on the second computing device.

Taylor discloses the step of displaying a third file icon when the file has not be updated (Figure 20A, column 28, lines 3-6).

It would have been obvious to a person of ordinary skill in the art at the time of invention was made to modify the disclosure of Aboulhosn, Wolff and Window 98 combination to include

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different display for unsynchronized files as taught by Taylor for the purpose of identifying unsynchronized files (column 27, lines 23-26, Taylor). The skilled artisan would have been motivated to improve the invention of Aboulhosn, Wolff and Window 98 combination per the above such that different icon is used to indicated the file is not updated (column 27, lines 23-29, Taylor).

As to claim 8, Aboulhosn discloses **wherein the first shared space display area is a folder object** (Figure 1, column 3, lines 66-67, column 5, lines 17-19).

Response to Arguments

Applicant's remarks and arguments presented on May 05, 2008 have been fully considered but they are moot in view of the new grounds of rejection presented in this office action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shew-Fen Lin whose telephone number is 571-272-2672. The examiner can normally be reached on 8:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Shew-Fen Lin /S. L./
Examiner, Art Unit 2166
July 18, 2008

/Hosain T Alam/

Supervisory Patent Examiner, Art Unit 2166